

# **Open Knowledge Network East African Pilot Project Evaluation**

## **ALIN Hub Report**

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## ALIN Hub Report

A consultancy report prepared as part of the Evaluation of the OKN East African Pilot for the Open Knowledge Network (OKN) Africa Programme

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## **ABBREVIATIONS**

ACK	Anglican Church of Kenya
AfriAfya	African Network for Health Knowledge Management and Communication
ALIN	Arid Lands Information Network
AMREF	African Medical and Research Foundation
DOTForce	Digital Opportunity Task Force
G8	Group of 8
ICTs	Information and Communication Technologies
IPR	Intellectual Property Rights
ITDG	Intermediate Technology Development Group
MRTC	Maasai Rural Training Centre
OKN	Open Knowledge Network
PC	Personal computer
TOR	Terms of reference
UN ICT Task Force	United Nations Information and Communication Technologies Task Force

## **EXECUTIVE SUMMARY**

The Open Knowledge Network's (OKN) commissioned the evaluation of the East African Pilot project in October 2003 to test how the OKN principles and technicalities worked in the East African context. A further purpose was to provide lessons from the Pilot and to point the way forward for the future. The exercise focused on two hubs—African Network for Health Knowledge Management and Communication (AfriAfya) and the Arid Lands Information Network (ALIN) East Africa—and eight access points—Kibera, in Nairobi; MRTC in Kajiado; Kwale–Mtaa and Kwale town at the Kenya coast; Siaya, Bunyala and Diemo, in western Kenya; and HASHI Shinyanga in Tanzania. The evaluation answers questions pertaining to content, language, gender and developmental issues. It also addresses skills and training; intellectual property rights (IPR); technical, organizational and financial sustainability issues. The evaluation is limited to assessing outputs and (direct) outcomes, and addressing the internal process at the community level. This report focuses on the ALIN hub.

OKN engaged Knowledge Trends as consultants for the evaluation, who conducted the exercise between 1 October and 5 November 2003. A checklist was designed to guide interviews with the knowledge worker and the technical officer, and an informal interview was held with the OKN Eastern Africa project manager. Data were gathered on local content, training and capacity building, IPR, technical aspects, organizational and financial sustainability.

ALIN East Africa is a regional network of community development workers involved in dryland development that aims to improve the efforts of grassroots development workers by facilitating the sharing and exchange of experiences, ideas and appropriate information. ALIN uses information communication technologies (ICTs), such as digital satellite broadcasting, and teaches members basic computer skills that enable them to access development information. ALIN has two OKN access points, one in Kajiado, Kenya, and the other one in Shinyanga, Tanzania.

### **Main findings**

The success of the ALIN hub relied heavily on the already established networks, infrastructure and stability of ALIN, AfriAfya, host and partner institutions.

The ALIN hub has been running well despite the various technical hitches at the beginning. Equipment acquisition, installation, and training of staff took place in July 2003. There were technical problems with Spring Pilot - the OKN software, which was developed by NatureSoft in India, as it had not been used and tested anywhere else. But

most of the problems have now been solved. The technical officer does not have access to the programme's source code so he does not fully understand how it works. The software, otherwise, is user-friendly, but some of its features could be improved and new ones added, such as a spellchecker, formatting and archival features. Some of these suggestions have been forwarded to NatureSoft by OKN.

For three weeks (mid September to mid October), access to WorldSpace was not possible, as its signals could not be received due to failure of the downlinks. This meant that content from the WorldSpace satellite system could neither be uploaded nor downloaded, and was a source of great anxiety, since no communication was received regarding the nature of the problem. This has since been sorted out.

A two-day training course was held in July 2003 in Nairobi, Kenya, for the ALIN and AfriAfya hub staff and reporters from the eight access points. The ALIN knowledge worker and the technical officer considered this period too short, especially considering that most reporters lacked basic computing and typing skills.

The ALIN sites and hub staff had developed about 145 stories. The key subject areas covered include: agriculture and health. The trend indicates that the quality of the stories has improved as reporters have overcome handicaps that pervaded the initial stages when they were not as confident or competent in writing of the stories. However, the target of 10 stories per week has not yet been reached at the ALIN access points.

The ALIN hub is managed by a lean functional staff comprising the OKN East Africa Pilot manager, one knowledge worker and one technical officer, who provide support to the ALIN and AfriAfya hubs and the eight access points. The technical officer also receives support from the Intermediate Technology Development Group (ITDG) and the African Medical and Research Foundation (AMREF) information technology units.

## **Lessons learned**

- Success of the access points is dependent on the already established goodwill, infrastructure and network of local partners
- The new software should be tested and debugged before being installed
- Feedback on technical problems should be provided as soon as possible to avoid anxiety and frustration
- Content should be packaged in a language the majority of community members understand
- Training sessions should last at least a week
- Partnerships are crucial in providing the necessary infrastructure and goodwill to implement project activities

- Teamwork is essential for the success of the project and could produce synergies that improve efficiency and effectiveness
- The capacity to generate valuable local content, communicate, and exchange knowledge and information has been strengthened through training and e-content
- Adequate awareness creation of the products and services, function and importance of the project are critical in expanding the user-base
- OKN and its strategic partners need to explore ways of sharing credit for the achievements of the project

## **Recommendations**

### *Technical*

- The technical officer should be provided with the source code of the software for clearer understanding of its functioning and to improve provision of the required support
- The software should be completely debugged and local language screens developed to facilitate data entry
- The software should have an archival feature (database) that stores all local content generated. It should also be improved to have a spellchecker and formatting features
- Problems with the WorldSpace system should be resolved more promptly to avoid interruption of services

### *Content*

- OKN management should enforce mechanisms that ensure achievement of the weekly target set for stories produced by access points
- Information products and services should be diversified by identifying new partners with comparative strengths in the respective development sectors, e.g. education, environment, water and sanitation
- Formal criteria should be developed for ensuring quality and value of content developed, and guidelines prepared for selection of stories
- Translation tools such as dictionaries should be provided to knowledge workers to facilitate translation of technical terms they are not familiar with

### *Training*

- Training sessions should last at least a week, and basic computing skills should be a prerequisite for reporters or computer training should be provided ahead of the training
- Additional training should be organized for reporters to upgrade their writing skills

### *Organizational and financial sustainability*

- Feedback should be provided promptly to OKN staff whenever a query is sent or a problem reported

Partnerships should be expanded to include sectors not being addressed by ALIN and AfriAfya

#### *Dissemination*

- Formal needs assessments of user needs should be carried out to ensure that the content developed matches current user needs
- OKN should explore opportunities for combining media (multimedia), including modern and traditional methods to disseminate content

#### *IPR*

- OKN should consider acknowledging contribution of local partners in content generation by adding their logos

#### *Organization and management*

- OKN and its strategic partners need to explore ways of sharing credit for the achievements of the project so that the partnership can grow and mature with all the partners feeling that they own a share of the success
- OKN staff should maintain statistics on stories received or rejected and the queries received and answered
- The project document should clearly outline the project objectives, outputs, activities and resources

# 1 INTRODUCTION

## 1.1 Open Knowledge Network (OKN)

The Open Knowledge Network (OKN) was initiated by the Digital Opportunity Task Force (DOTForce), which was set up by the G8 heads of state to contribute to the bridging of the digital divide. It is supported by the governments of Canada and the United Kingdom and is funded through OneWorld. This initiative has also been adopted by the United Nations Information and Communications Technologies Task Force (UN ICT Task Force). OKN provides a platform for people in developing countries to share local knowledge and development information in their own languages by providing appropriate software that facilitates file-sharing services. OKN has projects in Asia and Latin America, and pilot projects will be initiated in East, West and southern Africa. OKN's vision is to support positive change in the lives of the poor through using information and communication technologies (ICTs).

## 1.2 East African OKN Pilot

OKN signed a memorandum of understanding (MOU) with AfriAfya and the Arid Lands Information Network (ALIN) in June 2003 to initiate operations of the OKN East African Pilot, the first initiative in Africa. This pilot phase started in mid-July 2003 and ends mid-October 2003. The pilot has two hubs in Nairobi, Kenya — at ALIN and AfriAfya — and eight access points located in various peri-urban and rural field sites of the two organizations in Kenya and Tanzania. This report covers the ALIN hub.

## 1.3 ALIN

ALIN East Africa is a regional network of community development workers — such as community mobilizers and health and extension workers involved in dryland development — covering Ethiopia, Kenya, Tanzania and Uganda that aims to improve the efforts of grassroots development workers by facilitating the sharing and exchange of experiences, ideas and appropriate information. ALIN publishes a number of products including the *Baobab* magazine, which provides a platform for exchange of ideas, experiences and information, and booklets that stimulate sharing of experiences and lessons from development projects. The network also maintains a members' database with over 1000 grassroots change agents. ALIN does not have offices in the field but operates through focal groups that are managed by a geographical coordinator who facilitates targeted information sharing. To facilitate wide dissemination of information in the communities, ALIN uses information communication technologies (ICTs) such as digital satellite broadcasting, and teaches members basic computer skills and how to operate WorldSpace receivers to access development information. Other ICTs used include e-mail, Internet, telephone, audiovisuals and multimedia equipment. ALIN also uses traditional dissemination mechanisms such as exchange visits, open days and drama.

OKN identified two of ALIN'S field sites using ICTs for development information (particularly on agriculture) one in Kajiado, Kenya, and the other one in Shinyanga, Tanzania, to act as its pilot sites.

## **1.4 Scope of the consultancy**

The evaluation of the East African Pilot aims to 1) test the OKN principles and technical aspects in the East African context, 2) answer questions pertaining to the content (access, quality, use, mobile); language, gender and development issues; skills and training, intellectual property rights (IPR); and technical, organizational and financial sustainability concerns as spelt out in the terms of references (Appendix 1). The evaluation is limited to assessing outputs and (direct) outcomes, and to addressing the internal process at the community level. This preliminary report focuses on the ALIN hub.

Although the objectives of the East African Pilot focus more on technical aspects of the project, the bigger component of OKN deals with social, organizational, developmental, sustainability and human aspects. The objectives of the East African Pilot are:

- To test all key principles of the OKN framework in the East African context (in particular, the alternative approaches and options for the OKN software, the peer-to-peer network, the Open Knowledge Syndication Service, and the WorldSpace satellite system, and to further develop and test OKN's IPR framework in the East African context
- To test the application and integration of the cellular phone as a two-way OKN communication channel
- To test the compatibility of OKN with the WorldTalk voice application
- To test the OKN business plan and sustainability dynamic in an African context
- To test the OKN framework using different local languages
- To test the scalability of the OKN dynamic
- To continue to explore ways to mainstream a gender perspective within OKN
- To test how successfully knowledge workers can tag and control the quality of incoming local content from access points and research, and version and translate appropriate material from outside sources

This report highlights the main findings at the ALIN hub and the lessons learned from the pilot phase of the OKN Eastern Africa Pilot. The report also covers successes and challenges and provides recommendations for the future implementation of the OKN Eastern Africa project.

## **2 EVALUATION OF THE ALIN HUB**

Two consultants, Ms Hilda Munyua and Mr Muriuki Mureithi, worked with the OKN Eastern Africa project manager, Mr James Nguo, the knowledge worker, Ms Antoinette Miday, and the technical officer, Mr Humphrey Mwaura. The assessment included a desk study and individual interviews with the three staff members.

## 2.1 Evaluation methodology

A desk study was undertaken to review secondary information on the progress of the OKN East African Pilot and to gather data on technical, social, organizational, developmental, sustainability and human aspects of the project. A checklist for knowledge workers was designed to guide the interviews with the knowledge worker and the technical officer, to gather information on local content, training and capacity building, IPR, technical aspects, and organizational and financial sustainability issues. An informal interview was also held with the OKN East African project manager.

Three interviews were conducted and the questionnaires coded and summarized in Excel and analysed using Pivot Tables.

## 2.2 Main findings

The success of the ALIN hub relied heavily on the already established networks, infrastructure and stability of ALIN, AfriAfya, host institutions and local partners.

### 2.2.1 Technical issues

#### *Telecommunications infrastructure*

The OKN software allows offline working, which is an advantage considering the poor telecommunications infrastructure in rural areas of East Africa.

#### *E-mail / Internet connection*

E-mail and Internet connection at the ALIN hub are fairly stable, but occasional outages occur, causing interruption and necessitating reconnection. These are sometimes caused by problems with the Internet service provider (ISP) or the backbone - Jumbonet.

Only one access point (Kajiado–Maasai Rural Training Centre) has both e-mail and Internet access: the other seven work offline and save their work on diskettes to be sent by e-mail to the ALIN hub from the nearest cyber café. The distance to the nearest cyber café from the Shinyanga access point is about five kilometers (Table 1). The Lack of e-mail and Internet facilities at the access points causes undue delays in sending data to the hubs. The problem is compounded when the Internet supply at ALIN is down, causing further delay in transmission of data to the syndication server in the United Kingdom. The ALIN hub has good telecommunication infrastructure and is supported by ITDG and AMREF IT units.

Table 1. Telecommunication infrastructure at ALIN Access Points

Access point	Internet/e-mail availability	Nearest cyber café	Mode of data transfer to hub
Kajiado	√	On-site	e-mail
Shinyanga	x	5 kM	e-mail

#### *Electricity*

Power supply is fairly stable, but occasional power fluctuations force the server to restart. This led to problems in restarting the OKN system initially. Details of problems encountered with the technical system are presented in Table 2.

### *Software*

The OKN software was developed by NatureSoft in India and had not been tried out elsewhere. The Spring Pilot design is good and the software is user-friendly but it requires debugging. Initially it had many bugs, which NatureSoft promptly attended to once they were reported. One major hiccup had to do with the failure to load all functions of the software after a power outage. This rendered the ALIN hub non-operational, because the server malfunctioned whenever there was power interruption. The technical officer reported the problem to OKN staff in the UK, to communicate with NatureSoft, who then wrote a new script for restarting the hub's OKN system. This solved the problem. Additional features suggested for the software include a database to store information fed into the OKN system in web format, a search engine to facilitate retrieval of information using key words, and a feature that provides statistical reports, for example on how many stories have been prepared by each access point. The English language data entry screens have been translated into Kiswahili to facilitate inclusion of Kiswahili content.

Table 2: Problems encountered with the technical system

<b>Technical stage</b>	<b>Reliability</b> <b>(How often did it break down)</b>	<b>Problem encountered</b>			<b>Intervention</b>
<b>Access point system</b>		<b>(Functionality)</b>	<b>(Usability)</b>	<b>(Maintenance)</b>	
<b>PC</b>	No problem	Functioning well	Good	Some reporters not computer literate so delete files or format hard disk	Technical officer restricts rights, re-installs software, copies deleted files and trains reporters
<b>Software</b>	Windows XP used and is reliable	Functioning well	Good	-	Technical officer restores any deleted files
<b>Infrastructure</b>	Telephone and electricity fairly stable and e-mail and Internet fairly reliable where available	Kajiado MRTC telephone exchange old (problematic/ congested)	Inconsistent connection		Telephone breakdown reported to Telkom Kenya. For e-mail / Internet connectivity, keep on dialling when line not stable else use floppy and courier services
<b>Consumables</b>	No problem	-	-	-	Consumables provided through ALIN
<b>World Space</b>	3 weeks	No signals hence cannot upload or download content	Technology works well regardless of location if antennae facing satellite		
<b>Connectivity of AP to hub (e-mail/ floppy)</b>	Only Kajiado MRTC has connectivity to ALIN hub	No connectivity at other sites, hence floppies and cyber cafes used to e-mail the files or use courier services. Some of the cyber cafes are far and courier services cause delays			Cyber cafes are used or courier services to deliver floppy to hub
<b>Hub software</b>	Initially not reliable but now stable	(Usability) Many bugs at the beginning, problems restarting software after power outage, editorial changes not saved. User friendly but screen for editing too small and spellchecker, statistical reports features and search engine lacking	(Skills required) Technical officer has information technology skills but need to understand more about the OKN software	(Maintenance) Problems reported to NatureSoft	NatureSoft has fixed most of the bugs
<b>Peer-to-peer interlinking</b>	Only ALIN and AfriAfya hubs have interlinking and chat facilities	Access points have the same processing capability as hubs, but communicate via satellite communication. They lack chat facilities and peer-to-peer interlinking			Request that this issue be addressed, but meanwhile communicating via e-mail
<b>Connectivity hub – syndication server to WorldSpace</b>	Reliable	No direct problem			
<b>WorldSpace downlink</b>	Not reliable. WorldSpace was once been down for 3 weeks	When there are no signals, reporters send stories to hub but don't get to download the new content added. This is frustrating and items with a short half-life such as news and job content go depending on expiry date			Breakdown reported to UK, who communicate with WorldSpace
<b>Mobile software Interface with Mobile Planet Safaricom</b>	Not yet operational	-			-

### 2.2.2 Content

The ALIN knowledge worker and the reporters at the ALIN access points have developed useful development content in English and Kiswahili. To date, 145 stories had been generated out of which 18 had been rejected (Table 3).

Table 3: Local content creation at ALIN Access Points

Access Point	Received	Rejected	Total
Kajiado	100	14	86
Shinyanga	45	4	41
Total	145	18	127

#### *Sources*

The main sources of information for the knowledge worker are reporters, ALIN and the Internet.

#### *Steps involved in tagging*

The key steps involved in tagging of content by the knowledge worker are receiving and reading the stories, editing them, preparing abstracts, and publishing the stories (Table 4). The information is then sent to the UK syndication server from where it is uploaded onto the WorldSpace system. The main challenges faced during tagging include the lack of a spellchecker, the lack of editing tools such as dictionaries for Kiswahili technical terms, inadequate writing skills among some reporters and the lack of formatting features in the OKN software.

Table 4 Key steps involved in tagging and challenges faced by ALIN hub

Key steps	Main challenges
Receive and read the story	<ul style="list-style-type: none"> <li>• None</li> </ul>
Editing	<ul style="list-style-type: none"> <li>• Software lacks a spellchecker</li> <li>• Kiswahili editing for technical terms is a challenge</li> <li>• Verifying accuracy of stories</li> <li>• Language construction problems</li> <li>• Inadequate writing skills of reporters, hence need for more details or of rewriting stories</li> <li>• Difficulties in translating Tanzanian Kiswahili</li> <li>• Software lacks formatting features e.g. for bulleting and italicising</li> <li>• Lack of translation tools such as Kiswahili dictionaries</li> </ul>
Abstracting	<ul style="list-style-type: none"> <li>• None</li> </ul>
Publishing	<ul style="list-style-type: none"> <li>• Generally OK but takes a few days before content is published</li> <li>• When WorldSpace system is down, publishing not possible</li> </ul>

### *Quality and value*

No formal criteria or guidelines have been developed by OKN to assess quality of stories, so the knowledge worker uses her own judgement, basing her decision on relevance, timeliness and credibility of the story, and by ringing the reporters when in doubt. Quality is assessed based on common sense, 5Ws and 1H and development issues. Value is assessed based on the community needs (Table 5).

Table 5 Assessment of quality and value of content generated at ALIN hub

<b>Quality</b>	<b>Value</b>
<ul style="list-style-type: none"><li>• Common sense</li><li>• Content should be based on development issues</li><li>• Avoidance of political / conflict / personal attacks on individuals</li><li>• 5 Ws and 1 H</li></ul>	<ul style="list-style-type: none"><li>• How the content benefits the community</li><li>• How content relates to community needs</li><li>• How content relates to information the community is seeking</li></ul>

The criteria used for rejecting content include incompleteness, use of incredible sources and irrelevance to the needs of the community. The main challenges in assessing the quality and value of content, obtaining information, versioning, translation, and answering questions at the ALIN hub are detailed in Table 6.

Table 6 Main challenges in assessing ALIN hub activities

<b>Activity</b>	<b>Main challenges</b>
Assessment of quality/value	<ul style="list-style-type: none"><li>• Lack of a formal criteria and guidelines for assessment of quality and value</li></ul>
Information sourcing	<ul style="list-style-type: none"><li>• Information overload</li><li>• Some information not available</li></ul>
Versioning	<ul style="list-style-type: none"><li>• N/A</li></ul>
Translation	<ul style="list-style-type: none"><li>• Translating Tanzanian Kiswahili</li></ul>
Answering questions	<ul style="list-style-type: none"><li>• High expectations from the community, with some questions being very broad and requiring a resource base broader than the scope of OKN</li></ul>

### *Language*

Most stories from ALIN access points are in English, and only a few are in Kiswahili. Abstracts are all in English. Communities around Shinyanga and Kajiado have expressed their preference for Kiswahili content, but editing Swahili material will be challenging.

Table 7 Key subject areas covered by ALIN access points

<b>Kajiado</b>	<b>Shinyanga</b>
<ul style="list-style-type: none"> <li>• Agriculture and livestock husbandry</li> <li>• Health</li> <li>• Social development</li> <li>• Water</li> <li>• Education</li> <li>• Culture</li> </ul>	<ul style="list-style-type: none"> <li>• HIV/AIDS</li> <li>• Health</li> <li>• Agriculture</li> <li>• Water</li> </ul>

### ***2.2.3 Dissemination***

After the hubs tag the information and content is developed, this is published and uploaded onto the WorldSpace satellite System. The information is then downloaded onto a server for all the communities in the pilot project to access and share. Communities in the East African region value the local content, and the content developed is being shared, exchanged and applied in different communities. Queries that reporters cannot handle are sent to the ALIN hub, where information from alternative sources is used by the knowledge worker to respond to questions. Statistics are not kept on queries received and answered, so one cannot tell how many questions have been posed or answered. Other communication channels suggested for wider dissemination of knowledge and information include community radio in Kiswahili or vernacular languages, and a community newsletter. The ALIN hub organized an open day on 16 October 2003 at the Kajiado MRTC to create awareness among the community on OKN products and services. This function was a big success and was attended by more than 200 members comprising government officers, local administration, NGOs, CBOs, farmers, traders, teachers, students and other organizations operating around Kajiado. Awareness creation is crucial for the success of the project, as the value of the content is in its use and application to improve the livelihoods of communities around the access point and elsewhere. This should increase the user-base, which will ensure sustainability when services will have to be paid for.

### ***2.2.4 Gender***

There is gender balance among OKN staff at the ALIN hub, where there two male and one female staff. This is particularly important when working in the field, as some cultures make it easier for women to interact with a female worker. Moslem women would be freer to engage in discussion with a female worker.

### ***2.2.5 Skills and training***

Only one training session was conducted for knowledge workers, reporters and other OKN staff. This lasted two days and covered technical aspects of the hardware and software, sourcing of information, writing stories, tagging and publishing stories, and dissemination. The knowledge worker believed that the training adequately prepared her for effective and efficient performance of her work, but that it should have been extended to allow reporters to acquire adequate writing skills.

### ***2.2.6 Intellectual Property Rights***

It is not clear whether there is a formal OKN IPR guiding principle other than the statement on the OKN system worksheet on creating content. So far, no IPR issues have arisen, but the knowledge worker believes that the communities should have the right to identify with the information they contribute, and therefore they should be acknowledged unless they object to this. Knowledge workers were not familiar with the Kenyan IPR policies. The Harvard School of Law, which has been looking into IPR issues, should to ensure the OKN IPR formulation is consistent with national IPR policies.

The ALIN hub has developed content that it is keen to share freely for development purposes. Some of this content has been developed using funds from development partners who are co-owners of the content. Copyright issues thus need to be adhered to avoid conflict of interest. OKN may, therefore, want to explore better ways of acknowledging contribution of the local partners in content developed and ascribing any accruing benefits. The IPR formulation should also ensure the contributors of local content are protected from commercial exploitation of their knowledge and information.

### ***2.2.7 Developmental issues***

Development is a slow process and especially so in the localities where the OKN access points are situated. It is too soon to measure development and impact of the pilot at hub level. The capacity to generate local content of value, communicate and exchange knowledge and information has been strengthened through training and e-content.

### *2.2.8 Organizational aspects*

The OKN local partners – ALIN, AfriAfya, host institutions and local partners have contributed a great deal to the success of the ALIN hub and access points. OKN and its strategic partners need to explore ways of sharing credit for the achievements of the project so that the partnership can grow and mature with all the partners feeling that they own a share of the success.

The ALIN hub has three staff members: the OKN East African project manager, one knowledge worker and one technical officer. The knowledge worker edits stories received from ALIN access points and writes others, and guides reporters. The technical officer oversees equipment and software issues at the hub and the OKN access points. He handles all software problems and reports them to the Ken Kitson in the OKN office in the United Kingdom, who reports them to NatureSoft in India. Technical problems such as those experienced with WorldSpace are reported to the OKN office in the UK from where they are forwarded to WorldSpace. The technical staff are all graduates with sound experience in information management, communication and ICTs. The project manager supervises and coordinates the activities of the project together with a co-manager based at the AfriAfya hub. The staff are satisfied with the staffing levels and the way the project is managed and are clear about the reporting lines. The ALIN hub enjoys good team spirit and staff feel they all need one another. They also have good working relations with AfriAfya hub staff, and the two hubs support each another.

The OKN East Africa Pilot staff have not seen the full OKN project document, hence they are not clear how the East Africa Pilot fits into the main OKN project. The project direction has, therefore, come from OneWorld as they developed the project proposal and determined the structure, time and budgets. It is important that all partners share the same vision to be able to work out how they meet what is expected of them and their level of commitment. The project document for the East Africa Pilot does not clearly spell out the project objectives, outputs and the corresponding activities and resources that need to be implemented to realize the objectives and expected results. This would make implementation and monitoring of the project much easier. Local staff should be included in the development of the project document to ensure ownership and to avoid top-down approaches.

The pilot period was initially planned for one month but this was extended to three months. Three months was considered too short a period to measure social, economic or developmental impact. Considering that the software had not been tried out elsewhere, a pilot period of more than six months would have been more appropriate and realistic.

### ***2.2.9 Financial sustainability***

Although ALIN does not finance the OKN East African Pilot, it has made major contributions in terms of staff time, goodwill and provision of content, which has been developed over the 15 years of ALIN's existence. The OKN East African Pilot has benefited significantly from ALIN's positive image and its staff's support to OKN activities.

ALIN also provides OKN with the infrastructure and network required for its activities. No fundraising or market assessment activities have been carried out so far, but Abbott Consulting is developing the OKN sustainability model.

## **3 LESSONS LEARNED**

### *Technical*

- The software should be tested and debugged before being installed, to ensure it is functioning properly to avoid frustrations and time wastage
- Feedback should be provided as soon as possible whenever a technical problem is reported, to avoid anxiety and frustration

### *Content*

- Content should be packaged in a language the majority of community members understand

### *Training*

- Training sessions should last at least a week, and basic computing skills should be a prerequisite for reporters or computer training should be provided ahead of the OKN training

### *Organizational and financial sustainability*

- Success of the access points is dependent on the already established goodwill, infrastructure and network of local partners
- Partnerships are crucial in providing the necessary infrastructure and goodwill to implement project activities. There are synergies from partnerships that ensure sustainability of the project
- OKN and its strategic partners need to explore ways of sharing credit for the achievements of the project
- Teamwork is essential for the success of the project and could produce synergies and enable people to work together more effectively
- The capacity to generate valuable local content, communicate, and exchange knowledge and information has been strengthened through training and e-content

- Adequate awareness creation of the products and services, function and importance of the project are critical in expanding the user-base and ensuring sustainability

## **4 CONCLUSION AND RECOMMENDATIONS**

### **4.1 Conclusion**

The contribution of ALIN and AfriAfya and all local partners need not be overemphasized but it suffices to state that the success of the OKN pilot relied heavily on the already established networks, infrastructure and stability of the local partners.

The pilot has realized its objective of testing the technical aspects of the project. With the exception of the technical problems experienced with the OKN system at the beginning of the project and those associated with the WorldSpace system, ALIN hub activities have progressed well. The Spring Pilot has now been debugged and if the few additional features recommended by staff of the OKN East Africa Pilot are added, it should be ready for use at new sites. The value added to ALIN by OKN is in augmenting the types of information provided to ALIN centers (other than on agriculture) and ensuring wider dissemination of diversified (multisectoral) information catering for the needs of the communities. OKN has also helped foster synergies of ALIN and AfriAfya for the benefit of communities they serve. It is too early to assess the social, economic and developmental changes brought by the pilot, but there is a need for baseline data and milestones to enable assessment of the contribution of the OKN project per se. OKN needs to create awareness of the project at all access points to ensure there is demand for its products and services as demonstrated by the successful open day organized by ALIN at the Kajiado MRTC.

### **4.2 Recommendations**

#### *Technical*

- The technical officer should be provided with the source code of the software for clearer understanding of the software's functioning and to improve provision of the required support
- The software should be completely debugged and local language screens developed to facilitate data entry
- The software should have a database that stores (archives) all local content generated. It is recommended that Spring Pilot, the OKN software, be equipped with a spellchecker and features for text formatting such as for italicising and bulleting
- Problems with the WorldSpace system should be resolved more promptly to avoid interruption of services.

#### *Content*

- OKN management should enforce mechanisms that ensure achievement of the weekly target set for stories produced by access points
- Information products and services should be diversified by identifying new partners with comparative strengths in the respective development sectors, e.g. education, environment, water and sanitation
- Formal criteria should be developed for ensuring quality and value of content developed, and guidelines prepared for selection of stories
- Translation tools such as dictionaries should be provided to knowledge workers to facilitate translation of technical terms they are not familiar with

#### *Training*

- Training sessions should last at least a week, and basic computing skills should be a prerequisite for reporters or computer training should be provided ahead of the training
- Additional training should be organized for reporters to upgrade their writing skills

#### *Organizational and financial sustainability*

- OKN and its strategic partners need to explore ways of sharing credit for the achievements of the project so that the partnership can grow and mature with all the partners feeling that they own a share of the success
- Feedback should be provided promptly to OKN staff whenever a query is sent or a problem reported
- Partnerships should be expanded to include sectors not being addressed by ALIN or AfriAfya

#### *Dissemination*

- Formal assessment of user needs should be carried out to ensure that the content developed matches current user needs
- For content delivery, OKN should explore opportunities for combining media (multimedia), including traditional and modern methods such as drama and folklore, audio tapes, television, video and local FM radios

#### *IPR*

- OKN should consider acknowledging contribution of local partners in content generation by adding their logos

#### *Organization and management*

- OKN staff should maintain statistics on such aspects as number of stories received or rejected and the queries received and answered. This would form the benchmark or basis of future evaluation and impact assessment
- The project document should clearly outline the project objectives, activities and resources.

## **Appendix 1**

## **List of Persons Interviewed**

Mr. James Nguo

Manager of OKN East Africa Project

Ms. Antonette Miday

Knowledge Worker

Mr. Humphrey Mwaura

Technical Officer